

IN THE CLAIMS

Please amend the claims as follows. Please add new claims 49-97 as stated below. Please cancel claims 1-48 without prejudice or disclaimer.

1. through 48. (Cancelled)

49. (New) An oilseed plant having a nucleic acid molecule comprising a promoter functional in a host plant cell operably linked to a polynucleotide that has at least 70% identity to SEQ ID NO: 2 or complement thereof or fragment of either, and a transcriptional termination region functional in said host plant cell, wherein a seed of said oilseed plant exhibits a modified fatty acid composition that is about 26-80% oleic acid, about 2.97-49.92% linoleic acid, and about 3.38-8.81% linolenic acid.

50. (New) The oilseed plant according to Claim 49, wherein said oilseed plant is a soybean plant.

51. (New) The oilseed plant according to Claim 49, wherein said oilseed plant is a canola plant.

52. (New) The oilseed plant according to Claim 49, wherein said polynucleotide has at least 80% identity to SEQ ID NO: 2 or complement thereof or fragment of either.

53. (New) The oilseed plant according to Claim 49, wherein said polynucleotide has at least 90% identity to SEQ ID NO: 2 or complement thereof or fragment of either.

54. (New) The oilseed plant according to Claim 49, wherein said polynucleotide has at least 95% identity to SEQ ID NO: 2 or complement thereof or fragment of either.

55. (New) The oilseed plant according to Claim 49, wherein said polynucleotide is SEQ ID NO: 2 or complement thereof or fragment of either.

56. (New) The oilseed plant according to Claim 49, wherein said promoter is a heterologous promoter.
57. (New) The oilseed plant according to Claim 49, wherein said polynucleotide is a fad2 intron or complement thereof or fragment of either.
58. (New) An oilseed plant having a nucleic acid molecule comprising a promoter functional in a host plant cell operably linked to a polynucleotide that is a fad2 or a fad3 intron or complement thereof or fragment of either, and a transcriptional termination region functional in said host plant cell, wherein a seed of said oilseed plant exhibits a modified fatty acid composition that is about 26-80% oleic acid, about 2.97-49.92% linoleic acid, and about 3.38-8.81% linolenic acid.
59. (New) The oilseed plant according to Claim 58, wherein said oilseed plant is a soybean plant.
60. (New) The oilseed plant according to Claim 58, wherein said oilseed plant is a canola plant.
61. (New) The oilseed plant according to Claim 58, wherein said polynucleotide is SEQ ID NO: 2 or complement thereof or fragment of either.
62. (New) The oilseed plant according to Claim 58, wherein said promoter is a heterologous promoter.
63. (New) The oilseed plant according to Claim 58, wherein said polynucleotide is a fad2 intron or complement thereof or fragment of either.
64. (New) The oilseed plant according to Claim 58, wherein said polynucleotide is a fad3 intron or complement thereof or fragment of either.

65. (New) An oilseed plant having a nucleic acid molecule comprising a promoter functional in a host plant cell operably linked to a polynucleotide that has at least 70% identity to SEQ ID NO: 2 or complement thereof or fragment of either, and a transcriptional termination region functional in said host plant cell, wherein a seed of said oilseed plant exhibits a modified fatty acid composition that is about 50-75% oleic acid, about 10-30% linoleic acid, and about 3% linolenic acid.

66. (New) The oilseed plant according to Claim 65, wherein said oilseed plant is a soybean plant.

67. (New) The oilseed plant according to Claim 65, wherein said oilseed plant is a canola plant.

68. (New) The oilseed plant according to Claim 65, wherein said polynucleotide has at least 80% identity to SEQ ID NO: 2 or complement thereof or fragment of either.

69. (New) The oilseed plant according to Claim 65, wherein said polynucleotide has at least 90% identity to SEQ ID NO: 2 or complement thereof or fragment of either.

70. (New) The oilseed plant according to Claim 65, wherein said polynucleotide has at least 95% identity to SEQ ID NO: 2 or complement thereof or fragment of either.

71. (New) The oilseed plant according to Claim 65, wherein said polynucleotide is SEQ ID NO: 2 or complement thereof or fragment of either.

72. (New) The oilseed plant according to Claim 65, wherein said promoter is a heterologous promoter.

73. (New) The oilseed plant according to Claim 65, wherein said polynucleotide is a fad2 intron or complement thereof or fragment of either.

74. (New) An oilseed plant having a nucleic acid molecule comprising a promoter functional in a host plant cell operably linked to a polynucleotide that is a fad2 or a fad3 intron or complement thereof or fragment of either, and a transcriptional termination region functional in said host plant cell, wherein a seed of said oilseed plant exhibits a modified fatty acid composition that is about 50-75% oleic acid, about 10-30% linoleic acid, and about 3% linolenic acid.

75. (New) The oilseed plant according to Claim 74, wherein said oilseed plant is a soybean plant.

76. (New) The oilseed plant according to Claim 74, wherein said oilseed plant is a canola plant.

77. (New) The oilseed plant according to Claim 74, wherein said polynucleotide is SEQ ID NO: 2 or complement thereof or fragment of either.

78. (New) The oilseed plant according to Claim 74, wherein said promoter functional in a host plant cell is a heterologous promoter.

79. (New) The oilseed plant according to Claim 74, wherein said polynucleotide is a fad2 intron or complement thereof or fragment of either.

80. (New) The oilseed plant according to Claim 74, wherein said polynucleotide is a fad3 intron or complement thereof or fragment of either.

81. (New) An oilseed plant having a nucleic acid molecule comprising a promoter functional in a host plant cell operably linked to a polynucleotide that has at least 70% identity to SEQ ID NO: 2 or complement thereof or fragment of either, and a transcriptional termination region functional in said host plant cell, wherein a seed of said

In re Patent Application of JoAnne Fillatti  
June 27, 2003

oilseed plant exhibits a modified fatty acid composition that is about 80-85% oleic acid, about 1-2% linoleic acid, and about 1-3% linolenic acid.

82. (New) The oilseed plant according to Claim 81, wherein said oilseed plant is a soybean plant.

83. (New) The oilseed plant according to Claim 81, wherein said oilseed plant is a canola plant.

84. (New) The oilseed plant according to Claim 81, wherein said polynucleotide has at least 80% identity to SEQ ID NO: 2 or complement thereof or fragment of either.

85. (New) The oilseed plant according to Claim 81, wherein said polynucleotide has at least 90% identity to SEQ ID NO: 2 or complement thereof or fragment of either.

86. (New) The oilseed plant according to Claim 81, wherein said polynucleotide has at least 95% identity to SEQ ID NO: 2 or complement thereof or fragment of either.

87. (New) The oilseed plant according to Claim 81, wherein said polynucleotide is SEQ ID NO: 2 or complement thereof or fragment of either.

88. (New) The oilseed plant according to Claim 81, wherein said promoter is a heterologous promoter.

89. (New) The oilseed plant according to Claim 81, wherein said polynucleotide is a fad2 intron or complement thereof or fragment of either.

90. (New) An oilseed plant having a nucleic acid molecule comprising a promoter functional in a host plant cell operably linked to a polynucleotide that is a fad2 or a fad3 intron or complement thereof or fragment of either, and a transcriptional termination region functional in said host plant cell, wherein a seed of said oilseed plant exhibits a

modified fatty acid composition that is about 80-85% oleic acid, about 1-2% linoleic acid, and about 1-3% linolenic acid.

91. (New) The oilseed plant according to Claim 90, wherein said oilseed plant is a soybean plant.

92. (New) The oilseed plant according to Claim 90, wherein said oilseed plant is a canola plant.

93. (New) The oilseed plant according to Claim 90, wherein said polynucleotide is SEQ ID NO: 2 or complement thereof or fragment or either.

94. (New) The oilseed plant according to Claim 90, wherein said promoter is a heterologous promoter.

95. (New) The oilseed plant according to Claim 90, wherein said polynucleotide is a fad2 intron or complement thereof or fragment of either.

96. (New) The oilseed plant according to Claim 90, wherein said polynucleotide is a fad3 intron or complement thereof or fragment of either.

97. (New) A method of modifying the fatty acid composition in a seed of an oilseed plant comprising:

growing an oilseed plant that has a nucleic acid molecule comprising a promoter functional in a host plant cell operably linked to a polynucleotide that is a fad2 or a fad3 intron or complement thereof or fragment of either, and a transcriptional termination region functional in said host plant cell, and harvesting said seed of said oilseed plant, wherein said seed exhibits a modified fatty acid composition that is about 26-80% oleic acid, about 2.97-49.92% linoleic acid, and about 3.38-8.81% linolenic acid.